# Creating Accessible Documents

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### **Agenda**

Why Accessibility, Law, and Guidelines

Source Documents and Editing PDFs

Formatting

Properties

Additional Tools and Tips

# History- Why is web and document accessibility important?

- Access and opportunity
- ▶ Reach \*entire\* audience
- Documents open faster on mobile devices
- ▶ If our buildings are accessible, our electronic documents need to be

▶ It's the law ◎



In 1998, Congress amended the Rehabilitation Act of 1973 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. The law (29 U.S.C. § 794 (d)) applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology.

-Section 508 Law and Related Laws and Policies

Why Accessibility, Law, and Guidelines Source Documents and Converting to PDF

Source Documents and Alt Text Properties Additional Tools and Tips

## PDF and Universal Accessibility: International Organization for Standardization

- ► ISO 14283-1 (in process of revision) is a subset of and references ISO 32000
  - ► Electronic document file format enhancement for accessibility
  - ▶ Designed to identify the semantic information necessary for assistive technologies to access the information in the document such as text, structure, and organization of the content
  - ► Shall vs. May
    - ► E.g. Lists- individual list items <u>shall</u> be specified by <LI> tags. <LbI> and <Lbody> tags <u>may</u> be included.
  - Organization define their own specific rules
    - ▶ E.g. HHS requires <Lbl> and <LBody> tags for compliance
- Conventions
  - <Document> tag should be the first tag in the tree structure (not required by PDF/UA)
  - Artifact images with captions (no alternative text [alt-text])



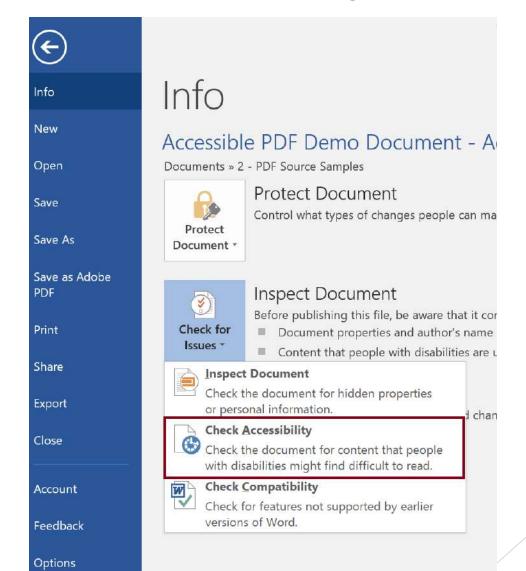
## References and resources for History, Law, and Guidelines

- ► International Organization for Standardization standards catalog ISO 14289-1
- Section 508 Law and Related Laws and Policies

#### **Source Documents**

- ► The source document is supreme
- Things to consider when creating a source document:
  - ▶ Does the authoring tool of the source document allow the author to create an accessible document?
    - ► For example: Microsoft Office has an Accessibility Checker to help the author make the document more accessible.
  - Does the author know how to create an accessible document?
    - ► For example: In Word, are Styles used to apply headings or are headings 'created' by changing the font size and making the font bold?
  - ► It's almost always easier to remediate the source document, and then convert to PDF.

### Microsoft Office "Accessibility Checker"



## Converting to a PDF from a Source Document

- ► Multiple Methods, Varying Results
  - ► Acrobat Plug-in (best method)
  - ► Application "Save As"
  - **►**Export
  - ▶ Print to PDF
  - **▶**Other conversion tools or plug-ins
    - ▶ Tables and lists may be inaccurately tagged
    - ▶ Resulting PDF may be untagged
    - ► Custom tags may be created



# Hierarchy of Tasks (Here There Be Monsters)

- ▶ Is the PDF crated from a scanned image?
  - ▶ If yes- perform text recognition
- ▶ Is the PDF a form with fillable form fields?
  - ▶ If yes- add the form fields
- Does the PDF document or form contain links?
  - ▶ If yes- add the links
- ▶ Does the PDF have multimedia?
  - ▶ If yes- add the multimedia (make sure it is accessible with captions and video descriptions)
- ▶ Now- tag the document
- ► After or during tagging, have you edited the document?
  - ▶ If yes, at the very least you will have to remove all tags and retag the document or form. It may be necessary to remove all tags, multimedia, links, and form fields and return to step 2.

# PDF Maker vs. Make Accessible (Autotagging)

- ► PDF Maker uses the semantic information of the source document to tag the PDF
- ► Make Accessible attempts to imply the structure of the document

#### Acrobat Pro DC PDF Accessibility – The Basics Converting to PDF for an Accessible Word Document

This is a test document to use for converting an accessible Word doc to and accessible PDF. This document uses the basic functionality in Word to create accessible documents.

#### Headings

Headings are essential for the structure of the document and for ease of navigation using a screen reader. Heading must be used in a hierarchical manner. Unlike in HTML, according to the PDF/UA standard, multiple Heading 1's can be used in a PDF.

#### Text

#### Paragraphs

indentations and paragraph spacing should be used in a Word document for structure. This prevents the screen reader from reading blank spaces and lines and avoids the need, upon conversion to PDF, to artifact those elements.

#### Color

It is always best to address color contrast issues in the original Word document. Although it may be possible to change text color in the PDF, it is difficult and may cause additional tagging issues. Below is a sample color wheel.



#### Lists

A correctly formatted list makes it easier for a screen reader user to understand the context within which the list is presented. Both bulleted and numbered lists, when created using the appropriate method in Word, will convert cleanly to well-tagged lists in a PDF.

#### Bulleted Lis

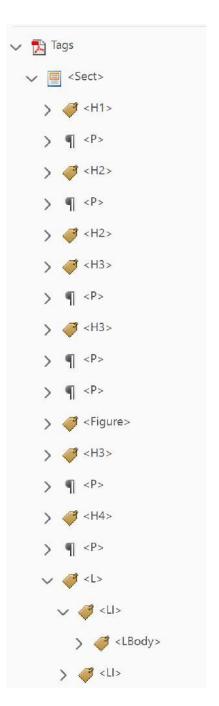
Bulleted lists are used commonly to delineate a list of information that may be too long or too detailed to present in sentence format. Type of bulleted lists include:

- · A list of non-prioritized items.
- A list of resources which may be links (e.g. <u>Adobe Corporate Accessibility page</u>)
- · A subset of detailed information that fleshes out a higher level comment or outline item.
- · Other information that doesn't need the hierarchy provided by a numbered list.

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PDF Maker >



< Make Accessible

### References and resources for Source **Documents and Editing PDFs**

- **►** Adobe
  - ► Adobe Acrobat Training Resources

Formatting and Alt Text



#### Text and Font

#### **Text and Font: Things to Remember**

- ► Font type
  - ►San-Serif is most acceptable
    - **▶**Sans-serif
      - ► Arial, Verdana, Lucida Sans
    - **▶** Serif
      - ▶ Times New Roman, Courier New, Century Schoolbook
- Use high contrast and bold when possible
- ► Font size: the bigger the better! Size 14 is generally acceptable
  - Example: Size 12 versus Size 14



### Paragraph



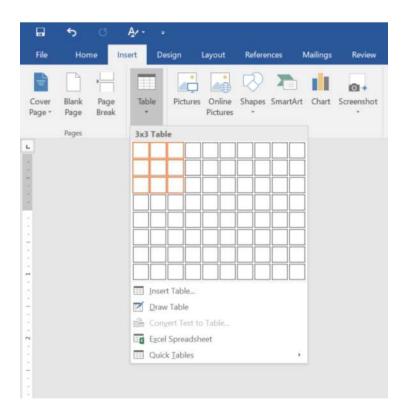
### Styles

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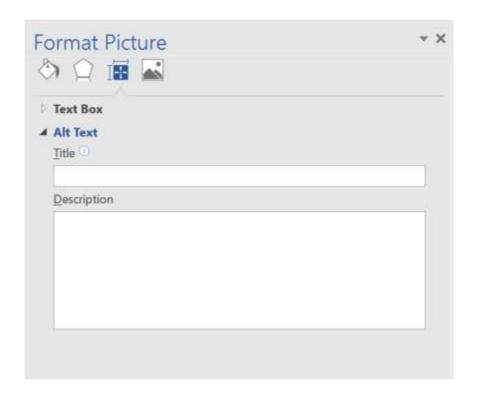
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#### **Tables**



### Alt Text

## Alt text picture 1



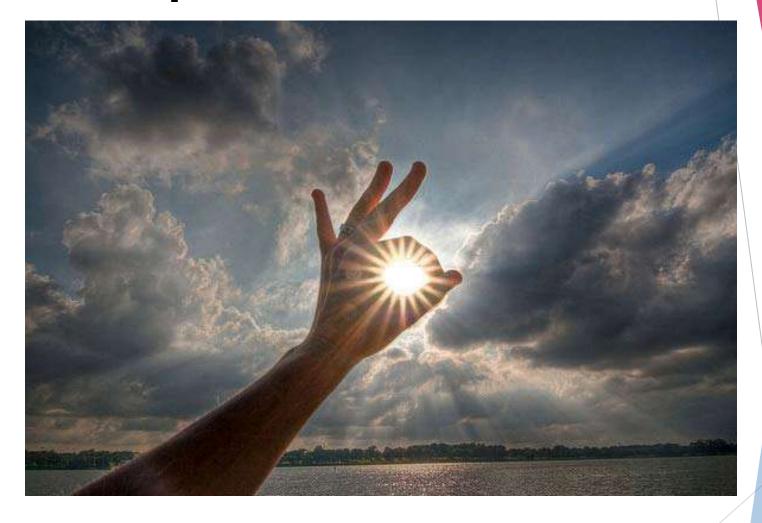
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## Alt text picture 2



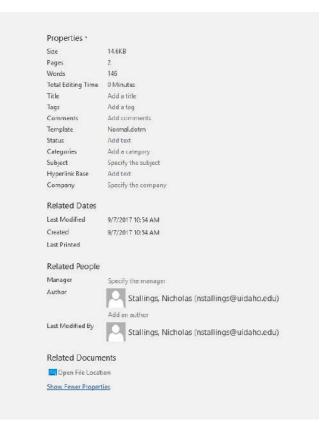
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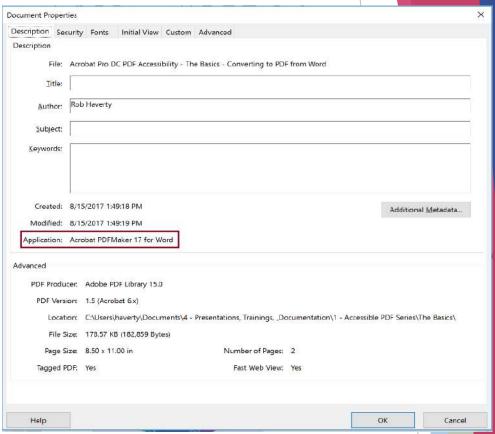
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#### **Formatting Resources**

- "How to Design Great Alt Text: An Introduction"
  - Deque.com Alt text Introduction
- "No More Excuses The Definitive Guide To The Alt-Text Field"
  - Phase 2 article on Alt-Text
- "Alt Text in Word: Title Vs Description"
  - ► Alt Text in Word
- ▶ "What's the best font size for the web? Well, it depends..."
  - ▶ Imarc article on font size
- Microsoft
  - ▶ Microsoft Office online resources
- Minnesota IT Services
  - ► MNIT Accessibility Homepage
- WebAim
  - ▶ WebAim





## Document properties

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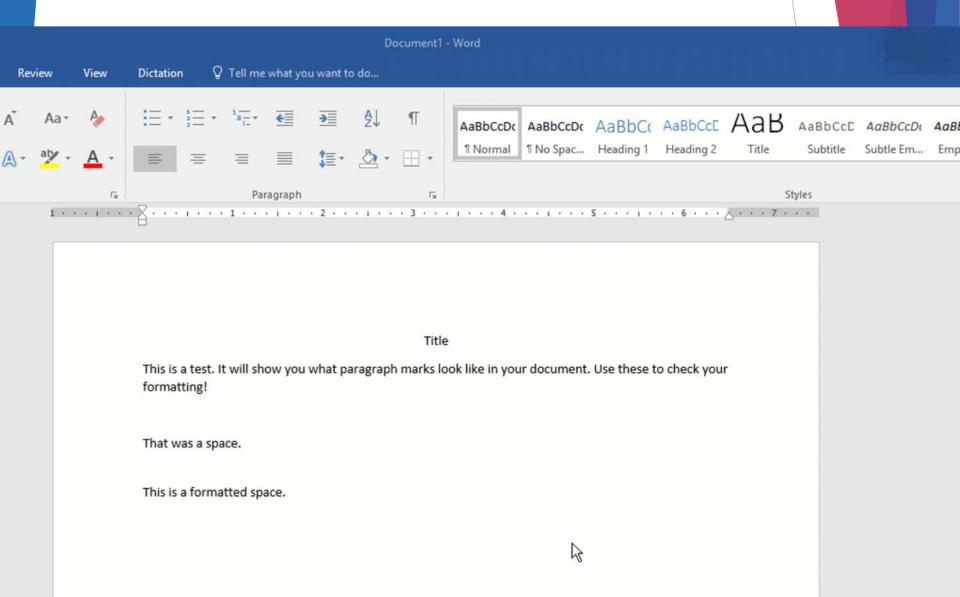
### Additional Tools and Tips

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#### Show paragraph spacing



## I OFTEN SAY THAT DESIGN IS REALLY HOW YOU TREAT PEOPLE"

"

#### -Yves Behar

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#### **WebAim**

- **▶** Center for Persons with Disabilities
  - **►** WebAim Resources
- Includes trainings (archived and live), Accessibility checker for websites, articles, and resources
  - **▶ WebAim Website Accessibility Checker**

#### Idaho Center on Disabilities and Human **Development- Projects that can help**

- ▶ Idaho Assistive Technology Project
  - ►Information and Communication Technology
- ► Idaho Training Clearinghouse
  - ► Learning Management System

Formatting and Alt Text